

**Comment on *Cornu* Born, 1778 (Mollusca, Gastropoda, Pulmonata, HELICIDAE):  
request for a ruling on the availability of the generic name**

(Case 3518; see BZN 68: 97–104, 282–292; 69: 124–127, 219–221)

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We are thankful to our colleague Ruud Bank for having communicated the manuscript of his comment in the *Cornu* case, enabling us to respond directly, as this will save time. Whenever we spoke of ‘correct names’ in this journal, we always did this in the sense of nomenclaturally correct names, never in the sense of taxonomically correct names. We do not believe the term ‘correct’ is appropriate in a taxonomic context. Taxonomy depends on personal judgements and there is no eternal truth dictating a certain classification. We are experts specialising in European pulmonates ourselves, and two of us (F. W.-S. and C. Aud.) classify *aspersa* in the genus *Helix*, as was done in a recently published identification guide on 2150 species of European molluscs (Welter-Schultes, 2012, p. 610). Those who do this can have various reasons for such a classification and take advantage of the freedom of science. Those who classify *aspersa* in a separate genus (e.g. C. Alt.) also have various reasons and also take advantage of the freedom of science.

R. Bank’s statement ‘it is now clear that *aspersa* is not a *Helix*’ is not in line with the usual form of scientific arguments that are brought forward (ordinarily one would say ‘the results suggest that *aspersa* is not a *Helix*’). The term ‘a *Helix*’ ignores the fact that the concept of a genus and the number of species included is never mandatorily fixed, and the definite use of ‘*aspersa*’ in this statement leads us to highlight another important detail that has been ignored in the previous discussion: the precise identities of some of the taxa involved. One problem is that the type of *Cornu* Born, 1778 is not *aspersa*, but *copiae*. And we see no evidence that *Helix aspersa* Müller, 1774 is based on a name-bearing type. Probably it is not.

Another problem is that the taxonomy of what we currently call *aspersa* is not fully understood and still remains to be studied in detail. We only partly agree with Cowie’s (2011) statement that there are no doubts about *copiae* and *aspersa* being synonyms. This is only the current state of research, and not based on results of appropriately designed studies. Recently Italian researchers have speculated that the Italian *aspersa* populations may consist of a variety of different taxa, possibly several different species (F. Liberto, pers. comm., 2012). This must be seen in the light of recent results in Sicily, published by Colomba et al. (2011) who suggested the



presence of three separate local species of the *Helix mazzullii* complex. Again this is a lecture of scientific progress.

These forms have long been classified as varieties of *Helix aspersa*, more recently as a very closely related but separate species *H. mazzullii* and finally, with more detailed knowledge, Colomba et al. (2011) suggested classifying them in a separate genus *Erctella* Monterosato, 1894. Nobody can currently exclude that something similar may not happen to the *aspersa/copiae* complex in the future, if Italian and non-Italian *aspersa* populations are studied more closely.

The name-bearing type of *Cornu copiae* Born, 1778 seems to have come from Spain (BZN 68: 287); the type locality of *aspersa* could be anywhere in Italy (Müller, 1774, p. 59). The two cannot be made objective synonyms.

Just declaring *aspersa* on the Official List as the valid name for *copiae*, as proposed in Cowie's (BZN 68: 97) third request, without knowing the exact identity of Müller's name *aspersa*, is not an ideal procedure. It is not well equipped for the future because such an entry could become meaningless with new insights, and the disputes could start again.

It would be desirable to have a stable genus-group name for *aspersa*, robust against changes in classification due to scientific progress, a genus-group name that is immune to nomenclatural or taxonomic disputes. The type species of *Cryptomphalus* Charpentier, 1837 is *Helix aspersa* (as already said by Cowie, BZN 68: 100), so this would be a stable name for *aspersa*. The three co-authors of this comment have different taxonomic views, but we would see *Cryptomphalus* as the better choice. If any future study came to the conclusion that *C. copiae* did not belong to *H. aspersa*, but perhaps to a surprisingly distantly related form, the genus *Cornu* could once again come into dispute. Setting *Cornu* on the Official Index would exclude such an undesirable situation.

We consider it a good idea of Cowie (BZN 68: 97) to ask the Commission for help in this disputed case. We would appreciate a definite decision – either by setting *Cornu* on the Official List or on the Official Index, but not an unclear or intermediate solution.

### Additional references

- Colomba, M.S., Gregorini, A., Liberto, F., Reitano, A., Giglio, S. & Sparacio, I. 2011. Monographic revision of the endemic *Helix mazzullii* De Cristofori & Jan, 1832 complex from Sicily and re-introduction of the genus *Erctella* Monterosato, 1894 (Pulmonata, Stylomatophora, Helicidae). *Zootaxa*, 3134: 1–42.
- Welter-Schultes, F.W. 2012. *European non-marine molluscs, a guide for species identification*. Pp. A1-A3, 1–679, Q1-Q78. Planet Poster Editions, Göttingen.



**Comment on *Turbo bidens* Linnaeus, 1758 (Gastropoda, CLAUSILIIDAE): request for setting aside the neotype**

(Case 3581; see BZN 69: 85–87, 213–218, 280)

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Forcart (1965, p. 122) was of the opinion that *Turbo bidens* Linnaeus, 1758 was only based on the cited illustration of Gualtieri (pl. 4, fig. C). Because this figure allegedly was one of *Cochlodina laminata* (Montagu, 1803), he thought that the name was not available for *T. bidens*; therefore the species should be named *Helix papillaris* O.F. Müller, 1774. However, *T. bidens* was not only based on that illustration, but was also accompanied by a diagnosis.

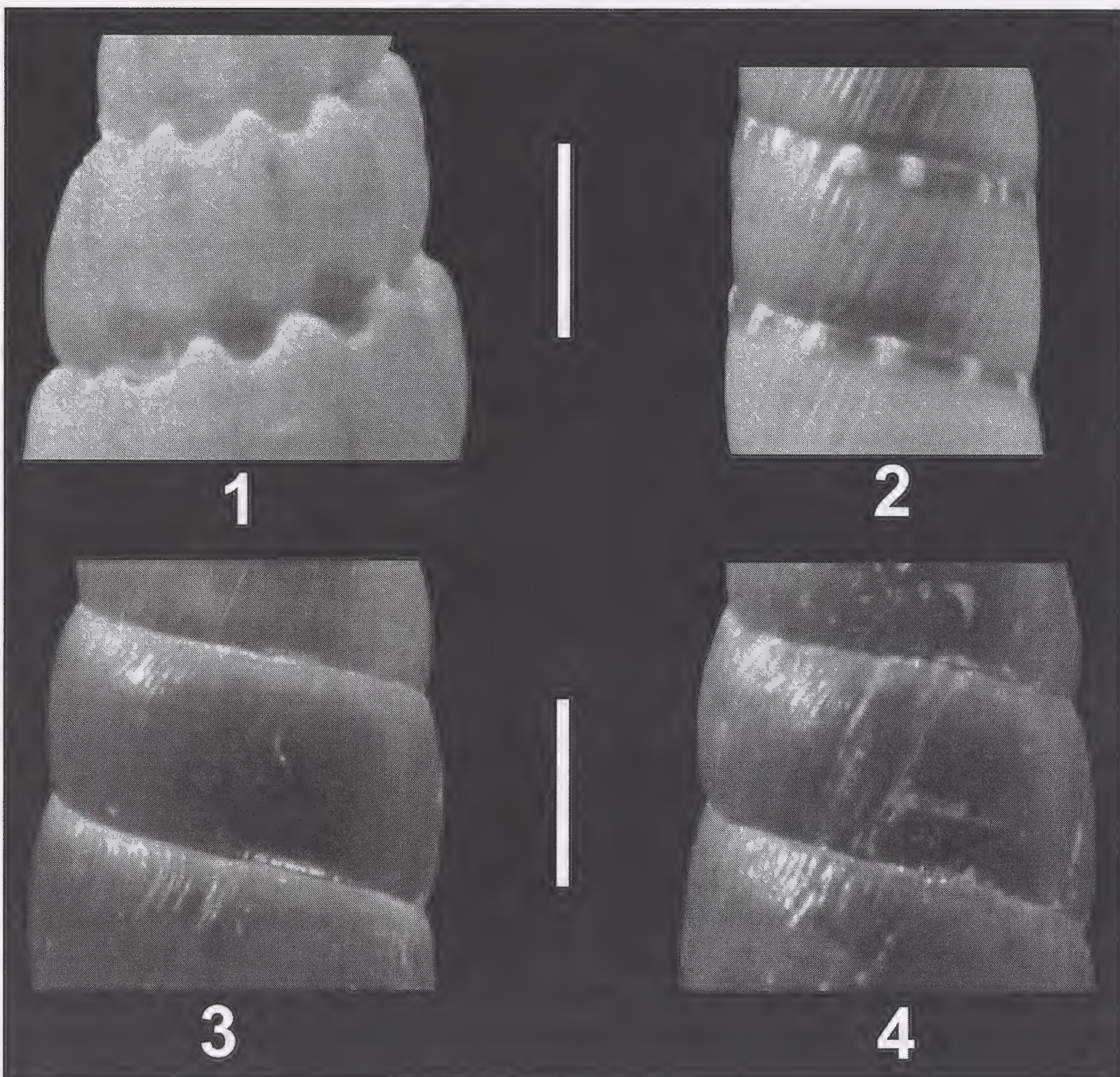
Falkner et al. (2002, p. 113) emphasized that Linnaeus' diagnosis ('sutura subcrenata') did not correspond with the illustration of Gualtieri, pl. 4, fig. C, but with the illustrations pl. 4, figs. D and E (which had already been noticed by Schröter, who revised Linnaeus's work). So they called the species *Papillifera bidens* (Linnaeus) and designated the specimen figured by Gualtieri (pl. 4, fig. E) as its neotype. This was a mistake, because a specimen designated as the neotype should be accessible for the study of the species characters (Article 75 of the Code, Recommendation B).

The Commission (2007, p. 195) decided that the name *Helix papillaris* O.F. Müller, 1774 was not to be maintained and put the name *Turbo bidens* Linnaeus, 1758 on the Official List of Specific Names in Zoology instead. However, they neither gave a comment on the problems with the use of the species name nor on the neotype designation of Falkner et al. This gave Kadolsky (2009) an opportunity, following previous statements of Giusti & Manganelli, to designate a neotype for *Turbo bidens*, which was said to correspond with Linnaeus' diagnosis as well as with Gualtieri's illustration pl. 4, fig. C, which is a specimen of *Cochlodina incisa* (Küster, 1876). For that he gave the reason that it was *C. incisa* which had been characterized by Linnaeus as having a 'sutura subcrenata' because it exhibited, in contrast to *C. laminata*, a 'faint crenellation of the suture'.

All clausiliid species which have ever been named *crenata* or *subcrenata* have sutural papillae and belong to the tribe DELIMINI; no author has ever had the idea of diagnosing *Cochlodina* species like *C. laminata* and *C. incisa*, in which at best growth lines are visible at the suture, as 'sutura subcrenata'. Besides, the shells of the two *Cochlodina* species mentioned are so similar that, for example, Giusti (1971, pp. 497–507) was unable to distinguish the two species in Italy. As is shown by a comparative illustration of the lower whorls of both species (Figs. 3–4), there are no differences in the development of the suture. The morphological statements, on which Kadolsky's neotype designation is based, are therefore incorrect and for this reason the designation is unacceptable and arguably invalid.

Kadolsky did not discuss the most probable possibility that Linnaeus made a mistake when he cited the illustration of Gualtieri. Both the name of the species ('bidens') and the diagnosis with 'sutura subcrenata' and 'apertura . . . bidendata' are inconsistent with Gualtieri's pl. 4, fig. C, which shows neither a weakly notched suture, nor an aperture with two 'teeth', but instead correspond with Gualtieri's pl.





**Figures 1–4.** SMF (Senckenberg Museum Frankfurt am Main); H shell height (mm). 1. *Opalia crenata*, Canary Islands, ex SMF, H 15.9; 2. *Papillifera bidens*, Italy, Tuscany, Firenze (outside of town), ex SMF 232184, H 14.2; 3. *Cochlodina incisa*, Italy, Abruzzi, Vado di Sole between Castel del Monte and Farindola (1640 m), ex SMF 334472, H 18.0. 4. *Cochlodina laminata*, same locality, ex SMF 334471, H 18.0.

4, fig. D in which both characters are clearly visible. What Linnaeus referred to as crenata and consequently as sub-crenata, can be seen on the shell of *Turbo crenatus* = *Opalia crenata* (Linnaeus, 1758) (Prosobranchia, EPITONIIDAE), diagnosed by Linnaeus as ‘anfractibus . . . supra crenatis’. This species has prominent notches at the suture (Fig. 1). Thus ‘sutura subcrenata’ means weaker notches at the suture, which is exactly what sutural papillae are, like those of *Papillifera bidens* (Fig. 2). The weak ‘crenulations’ at the suture of *Cochlodina incisa* which can be seen in Kadolsky’s figures as well as in Fig. 3 (and Fig. 4) of this comment are the ends of striae not much stronger than growth-lines at the suture which are present in several *Cochlodina* species. In shell descriptions those species are therefore described as ‘smooth’ (not considered in species names). They are much different from the small white knobs at the suture named sutural papillae which are present e.g. in DELIMINI species like *Papillifera bidens*. In shell descriptions DELIMINI species are therefore



described as provided with ‘papillae’ (considered in species names like *crenata*, *crenulata*, *subcrenata*, but also *papillaris*, *albopustulata*, *alboguttulata*, and in the genus name *Papillifera*). Besides, in the second edition of his *Systema Naturae*, Linnaeus (1767, p. 1240) added to his description of *Turbo bidens* an illustration of Buonanni (fig. 41) and thus made clear his opinion of that species. So the authors following Linnaeus, Schröter and Gmelin, were right in referring Linnaeus’s *T. bidens* to the species named *Clausilia bidens* by L. Pfeiffer (i.e. *Papillifera papillaris*) and later authors, and there is no doubt that the application of the name *P. bidens* to this species is correct.

### Additional references

- Falkner, G., Ripken, Th.E.J. & Falkner, M. 2002. *Mollusques continentaux de France. Liste de Référence annotée et Bibliographie*. Patrimoines naturels, 52: 350 pp.
- Forcart, L. 1965. Rezente Land- und Süßwassermollusken der süditalienischen Landschaften Apulien, Basilicata und Calabrien. *Verhandlungen der Naturforschenden Gesellschaft Basel*, 78(1): 59–184.
- Giusti, F. 1971. Notulae Malacologicae XVI. I molluschi terrestri e di acqua dolce viventi sul massiccio dei Monti Reatini (Appennino Centrale). *Lavori della Società Italiana di Biogeografia*, (NS) 2: 422–576, 7 pls.
- ICZN (International Commission on Zoological Nomenclature) 2007. Opinion 2176 (Case 3319). *Helix papillaris* Müller, 1774 (currently *Papillifera papillaris*; Mollusca, Gastropoda): specific name not conserved. *Bulletin of Zoological Nomenclature*, 64(3): 195.
- Kadolsky, D. 2009. *Turbo bidens* Linnaeus 1758 (Gastropoda: Clausiliidae) misidentified for 250 years. *Journal of Conchology*, 40(1): 19–30 (here also the complete literature on the nomenclature of the species).
- Linnaeus, C. 1767. *Systema Naturae*, Ed. 12. Tom. I, Pars II. Pp. 533–1327. Holmiae.

**Comment on a proposal to reinstate as available the species-group names proposed for Devonian ammonoids (Mollusca, Cephalopoda) by Sobolew (1914a, 1914b)**  
(Case 3600; see BZN 69: 170–177)

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The Case of the two Ammonoidea publications of Sobolew (1914a, b) – in 1956 placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature (Direction 32, following Opinion 132) – was a priori a serious and inexcusable mistake by the ICZN. According to the application the decision of 1936 dealing only with the generic names of Sobolew did not cover his specific names; therefore these were seen to be valid by all subsequent ammonoid workers up to present times.

A comparable incorrect decision in Opinion 946 (1971) ruled that the Rugosa/Tabulata (Anthozoa) publication of Ludwig (1865–1866) was suppressed for the purposes of the Principle of Priority and was placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature. This invalidation followed the application of Scrutton (1969). Just as in the case of Sobolew (1914), the majority



of Ludwig's generic names were interpreted as formulae, but there was no reason to also reject the specific names which were partially classified into traditional genera (*Amplexus*, *Hallia*, *Hadrophyllum*, *Aulacophyllum*, *Zaphrentis*, *Cyathaxonina*). A comment by Birenheide (1969) to retain one already revised species *Cyathophyllum* (*Peripaedium*) *planum* (Ludwig, 1866) remained unmentioned; in spite of that Birenheide (1978) regarded the Ludwig species as valid.

Case 3600 for making available all the Sobolew (1914) species-group names of Ammonoidea is fully supported.

### Additional references

- Birenheide, R.** 1969. The case for the retention of the specific name *Astroblastodiscus planus* in R. Ludwig's "Corallen aus paläolithischen Formationen" (*Palaeontographica*, 14: 228; 1866). *Z.N.(S.)* 495. *Bulletin of Zoological Nomenclature*, **25**: 220–221.
- Birenheide, R.** 1978. Rugose Korallen des Devon. In Krömmelbein, K. (Ed.), *Leitfossilien begründet von Georg Gürich*, 2. völlig neu bearbeitete Auflage, 2: vi, 265 pp. Borntraeger, Berlin-Stuttgart.
- Ludwig, R.** 1865–1866. Corallen aus paläolithischen Formationen. *Palaeontographica*, **14**: 133–244, 249–252, pls. 31–72.
- Scrutton, C.T.** 1969. The case for the suppression of R. Ludwig's "Corallen aus paläolithischen Formationen" (*Palaeontographica*, 14: 133–244, 1865–66) for the purposes of zoological nomenclature. *Z.N.(S.)* 495. *Bulletin of Zoological Nomenclature*, **25**: 156–161.

**Comments on *Scarabaeus* Linnaeus, 1758, *Dynastes* MacLeay, 1819, CARABAEINAE Latreille, 1802, and DYNASTINAE MacLeay, 1819 (Insecta, Coleoptera, SCARABAEOIDEA): proposed conservation of usage**  
(Case 3590; see BZN 69: 182–190, 293–295)

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I wish to register my strong support for conservation of the current usage of *Scarabaeus* and *Dynastes* and their associated higher taxa as proposed in Case 3590, but also wish to help clarify the matter of authorship of type designations in Jolyclerc (1807a, 1807b). Having obtained a copy of the original 1807 two-volume set, I have been researching this work and compiling a list of type designations in it and unfortunately misled the authors of this application when I advised them that the preface (page iii) had the information as to the authorship of Lamarck for the insect entries.

Hans Fery (BZN 69: 294) recently published a comment to this application pointing out that the authorship of the type designation for *Scarabaeus* might really be Jolyclerc himself. The title page of the second edition of this work cited by Fery (i.e. Jolyclerc, 1822), differs from the original 1807 title page and the wording that is there is immaterial to the current application; however, the preface and, as far as I can see, the remainder of the text of the 1822 work, are exactly the same as the 1807 version. Because the wording in the preface is equivocal as to any explicit authorship of the material by the specialists listed on p. iii of the preface, I conclude that the authorship of any zoological nomenclatural acts in the *Dictionnaire* should be Jolyclerc's alone.



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Concerning the genus-name *Scarabaeus* Linnaeus, 1758, it may be interesting to ask the question: are there Linnaean principles to support a decision about which species (*hercules* or *sacer*) is more legitimate as a type-species for this genus? The answer is yes, and we shall see that the more appropriate type, for Linnaeus, might have been *Scarabaeus sacer*.

In the Linnaean corpus, the largest collection of principles dealing with systematics is found in his *Philosophia Botanica* (Linnaeus, 1751). In spite of its title, the work does not deal only with plants but takes some of its arguments from the animal kingdom, for example in '§ 153. Dispositio Vegetabilium (Arrangement of Vegetables): (. . .) 'Naturalis instinctus docet nosse primum proxima & ultimo minutissima, e. gr. Homines, Quadrupedia, Aves, Pisces, Insecta, Acaros. . . ' (Natural instinct teaches to know first the closest and last the most minute, e.g. Men, Quadrupeds, Birds, Fishes, Insects, Mites. . .). Therefore, it is likely that the principles developed in *Philosophia Botanica* can be applied to animals as well. When we read in this work, '§ 246: Si Genus receptum, secundum jus naturae & artis, in plura dirimi debet, tum nomen antea commune manebit vulgatissimae et officinali plantae' (If a received genus, according to the right of nature and art, must be divided into several [genera], then the name formerly common will remain to the most vulgar and officinal plant), we feel free to use this principle for animals, in general, and for insects in particular. Consequently, in respect of the question asked, we have to make a proposal as to which one, of the two *Scarabaeus* (in the Linnaean sense), *hercules* or *sacer*, must be considered as the most vulgar and officinal.

The 'most vulgar' species, i.e. the most common of the two, the most well-known, is surely *Scarabaeus sacer*, a species which has been known in Europe and the Mediterranean countries since the Egyptians and Romans: the Romans used to bring Egyptian obelisks to Rome, and Linnaeus takes care to acknowledge it in his diagnosis of this species (Linnaeus, 1758, p. 347): 'Hic in columnis antiquis Romæ exsculptus ab Aegyptiis' ('This [species was] engraved by Egyptians on ancient columns in Rome'). For this species, and contrary to most other ones, Linnaeus did not provide bibliographical data: he probably thought the species was well known enough ('vulgatissima') and did not need additional references. On the other hand, '*Scarabaeus Hercules*', although large and remarkable, is an American species which was not known by European scholars before the seventeenth century; the first reference given by Linnaeus is Georg Marcgraf's *Historia Naturalis Brasiliae* of 1648 (Linnaeus, 1758, p. 345). Even in the eighteenth century, the species was a rare curio, to be found only in princely cabinets; nothing 'vulgar' in it!

As for 'officinal', in his *Historia Naturalis*, Pliny explained that Egyptian scarabs have a number of medicinal virtues. But the 'officinal' of Linnaeus is to be looked for more appropriately in the seventeenth and eighteenth century books referred to as 'materia medica' or 'pharmacopœia'. Johann Schröder's *Pharmacopœia Medico-Chymica* of 1641 stated that the '*Scarabaeus pilaris*', or 'pilularius' (= *Scarabaeus* in the current sense) had various uses in the cures of troubles of ear or eye and also of anus (hemorrhoids), appropriately for a dung beetle (Schröder, 1644, p. 324).



‘*Scarabaeus Hercules*’, on the other hand, was too precious and expensive to be prescribed by physicians and apothecaries; it is not mentioned in Schröder’s book nor in the more modern pharmacopoeia of James (1747).

As a conclusion, if we divide the former genus *Scarabaeus* in two genera according to Linnaeus’s own principles, then *Scarabaeus* (s.s.) should still include the species *sacer*, which is more vulgar and officinal. The species *hercules* should be placed in the other genus.

### Additional references

- James, R. 1747. *Pharmacopœia universalis*. 852 pp. J. Hodges & J. Wood, London.  
 Linnaeus, C. 1751. *Philosophia botanica, in qua explicantur fundamenta botanica, cum definitionibus partium, exemplis terminorum, observationibus rariorum*. 686 pp. Godofr. Kiesewetter, Stockholmiae.  
 Schröder, J. 1644. *Pharmacopœia medico-chymica, sive thesaurus pharmacologicus, quo composita quæque celebriora...* 596 pp. Ed. 2. Johannes Gerlinus, Ulmæ (original edition: 1641).

**Comment on the proposed conservation of usage of the specific name *Scarabaeus fimetarius* Linnaeus, 1758 (currently *Aphodius fimetarius*; Insecta, Coleoptera, SCARABAEIDAE) by designation of a neotype**  
 (Case 3579; see BZN 69: 29–36, 128–140, 221–229, 284–293)

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Since the publication of Case 3579 in December 2011, fifteen comments on the Case have been published. One might believe that all has been said; however, the recent comment by Krell & Angus (BZN 69: 285–290) contains a number of inaccuracies, some of which should certainly be challenged.

Krell & Angus devote about one quarter of their comment to show that *Aphodius fimetarius* (Linnaeus, 1758) as understood by almost all authors was a composite species, however, this is only half of the truth: the ‘other species’ was already described as distinct in 1892 (*Aphodius cardinalis* Reitter), after a short period disregarded as a species, but until recently often treated as an aberratio or morph or even an ‘eventual geographical race’ (e.g. Baraud 1977, 1985). It is not unusual that a species split into two species had been treated before that split as a composite species. It is, however, unusual and confusing that the two taxa should have names which were treated as synonyms for almost 250 years and for both of which the existing type material (paralectotypes of *Scarabaeus fimetarius* Linnaeus, 1758, and lecto- and paralectotypes of *Scarabaeus pedellus* De Geer, 1774) undoubtedly belongs to one and the same species. The confusion would be complete if the senior name (*fimetarius* Linnaeus, 1758) were attributed to the species that was described as distinct 130 years later (*cardinalis* Reitter, 1892), and the junior synonym (*pedellus* De Geer, 1774) were attributed to the species which was described as the first one (*fimetarius* Linnaeus, 1758).

Krell & Angus give as an example that ‘Fery himself labelled his proposed neotype of *Aphodius cardinalis* Reitter originally as *A. fimetarius* L.’ But which other name



should I have selected in 1984 when nobody believed in the existence of two species under that name? Additionally, it must be stated that in Fery (BZN 69: 128–136) a neotype for *A. cardinalis* Reitter was not ‘proposed’ but designated. Krell & Angus remark that ‘a hasty neotype designation is inappropriate’. My designation of the neotype of *A. cardinalis* was by no means hasty since all institutions which come into consideration as depositories of Reitter’s type material (Horn et al., 1990) had been contacted—except one which, unfortunately, had been overlooked: the Slezské Zemské Muzeum in Opava, Czech Republic. In January 2013, however, I was informed that no such type material is kept in the collections of that museum (pers. communication by curator J. Roháček). There is no evidence that any other institutions have material which can be undoubtedly attributed to Reitter.

Krell & Angus cite Barclay (BZN 69: 139–140) that ‘authors are likely to think of the typical *A. fimetarius* as the species usual in their geographical areas’ and give as an example that Bunalski (1999) illustrated the parameres from typical Central European specimens (with red elytra) while Paulian (1959) did so from French specimens (i.e. those with yellowish-red elytra). Krell & Angus must be granted that one can easily fall victim to an optical illusion if such figures are not properly oriented. However, a careful comparison with Rößner’s (unpublished) results shows that Paulian’s illustrations also belong to the species with the more gently downturned apices (i.e. the one with red elytra). Krell & Angus cite also Costessèque (2005) who is supposed to have figured ‘the aedeagus of *A. fimetarius* as abruptly downturned, rather typical for the light coloured species’. Costessèque gives the colour of the elytra as red (adding some darker variants) and reproduces the figure of the parameres from Baraud (1977) (reproduced also in Paulian & Baraud, 1982). A careful comparison with Rößner’s results shows again that Baraud’s/Costessèque’s figure (although rather schematic) also represents the species with the more gently downturned apices (i.e. the one with red elytra).

In addition to these works, there are several others which have influenced and formed the principal understanding of *A. fimetarius* sensu Rößner (2012) and Fery (BZN 69(2)): Baguena Corella (1967), Baraud (1977, 1985, 1992), G. Dellacasa (1983), G. Dellacasa et al. (2001), G. Dellacasa & M. Dellacasa (2006), M. Dellacasa (1988, 2004), Janssens (1951), Machatschke (1969), Paulian & Baraud (1982), and Reitter (1909). All these authors give the colour of the elytra as red, reddish-brown or dark red; only Janssens (1951) and Paulian (1959) add yellowish-red as a second or third possibility. Yellowish red elytra are given in Paulian & Baraud (1982) for the ‘ab. *subluteus* Muls.’ which is, however, specified as immature. G. Dellacasa & M. Dellacasa (2006) is the only work in which the parameres of the yellowish-red species are illustrated; the figures in all other works agree with Rößner’s results for the species with red elytra. *A. cardinalis* is the only taxon which is mentioned explicitly in all works of the more ‘southern’ authors except G. Dellacasa et al. (2001); it is either called ‘aberratio’ or ‘morph’ and considered also as an eventual geographical race by Baraud, and differentiated by the shape of the elytral intervals from the ‘normal form’ with red elytra. These differences between ‘normal’ *fimetarius* and the ‘morph’ *cardinalis* are even figured in G. Dellacasa (1983, figs. 304, 305).

All these works are widely read and not only known to students of any particular nationality. Hollande & Thérond (1999) are the only authors known to me who describe the elytral colour only as yellowish-red and that for specimens from



Northern Africa. However, they illustrate habitus and parameres typical for the species with red elytra. Machatschke (1969, p. 320) who in 'Die Käfer Mitteleuropas' (a work well-known in large parts of Europe) described *A. fimetarius* as a species with red or reddish-brown elytra and called lighter specimens immature. He also illustrated the parameres of *A. fimetarius* with more gently downturned apices and these are typical of the species with red elytra. Krell (1992, p. 228) in a supplement to Machatschke, did not correct this understanding of *A. fimetarius*, but added a character (matt elytral apices) attributed today to *A. cardinalis*, the species with yellowish-red elytra (see also Rößner, 2012).

Krell & Angus (BZN 69: 287) try to discredit Reitter's style of working and his species concept and therefore the value of his *cardinalis*. Reitter's Fauna Germanica (1908–1916) was a standard work in coleopteran entomology for more than half a century in large parts of Europe; also Sprague (1875, p. 373 ff.) devoted two pages to the quality of Randall's working style and the value of his species, including 'Randall's descriptions, when viewed with our present knowledge, are short, and not to the point; quite often color, and those parts that have no specific value, being all we have to depend upon. The beetles known as Randall's species, have long been a thorn in the side of the thorough and systematic entomological student.'

The remarks on Reitter's working style and business as insect merchant are irrelevant. Randall's, Mulsant's and Reitter's names are available—this is all we need to know. All are possible names for the yellowish-red species, because the descriptions include terms like 'bright reddish', 'jaune-rouge' or 'heller gelbroth'. The type localities of all taxa are known (U.S.A.; France (at least in part); Syria, Algiers, Andalusia). Except for elytral coloration, nothing more is known about *Aphodius nodifrons* Randall and *Aphodius subluteus* Mulsant to help distinguish them from the darker species. Randall states only that 'this insect is the counterpart of the *A. fimetarius* of Europe' (Randall, 1838, p. 20). Reitter, on the other hand, gives three further characters besides elytral coloration to separate both species (length and shape in cross-section of the intervals at the tip of the elytra, shape of the cheeks (the latter character was already discussed by Fery (BZN 69(4))), and thus provides a comparatively complete description. Krell & Angus cite Müller (1902, p. 446) who recorded a strong variability in the length of the intervals and thus considered both species identical. Müller's entire text on both species reveals, however, that he only studied this sole character and he gives not a single hint as to whether he had in fact studied both species or only one. According to Rößner (2012) both elytral characters can be used to separate the two species in most cases.

These considerations show that Reitter's taxon is the only one we can be sure is identical with the yellowish-red species (or the 'lighter species', *A. fimetarius* sensu Krell & Angus), and the designation of a neotype for *A. cardinalis*, together with the proposed suppression of Randall's and Mulsant's names, as well as the selection of a neotype for *S. fimetarius* by the Commission from the remaining paralectotypes is the best way to stop nomenclatural confusion.

Krell & Angus (BZN 69: 287) give four new references in which the species under consideration are named in their sense. In the time span since Case 3579 was submitted several papers have been published in which the name *A. fimetarius* is treated as it was before Wilson (2001) and at least two others in which this name is used in my sense: Číla & Král (2012) and Rößner (2012); the latter author also uses



the name *A. cardinalis* for the yellowish-red species (a list of all the references will be sent to the Secretariat). Contrary to the assertion of Krell & Angus, the respective distributions given by M. Dellacasa & G. Dellacasa (2006) show that their interpretation of Wilson's (2001) results is not in fact correct.

Krell & Angus argue again that parts of northern Germany belonged to Sweden at Linnaeus's time. However, it is extremely unlikely that Linnaeus studied material of the yellowish-red species from there because this species—except on one single occasion—has never been recorded in that region (Rößner 2012).

Krell & Angus express their surprise that 'the assignment of the names *A. fimetarius* and *A. pedellus* to the two species in question has not been criticised for a decade' and that only 'now that [they] initiated correction of the type selection for *A. fimetarius* . . . suddenly protests emerge'. The answer is simple: it took some time until a few dung-beetle specialists became aware of Wilson's work; then it was far from clear what consequences Wilson's type designations might have because in her work neither the elytral colour nor a clear distribution pattern of each species is recognisable; and then when a few specialists understood what had happened, they did not see a possibility of changing anything because the lectotypes had already been designated.

Finally, I want to refer to the last section of my comment in BZN 69(4), the content of which I still consider the only satisfying solution for this nomenclatural problem.

#### Additional references

- Baguena Corella, C.** 1967. *Scarabaeoidea de la fauna ibero-balear y pirenaica*. 576 pp. Instituto Espanol de Entomología, Madrid.
- Baraud, J.** 1977. Coléoptères Scarabaeoidea. IV. Faune de l'Europe Occidentale: Belgique - France - Grande Bretagne - Italie - Péninsule Ibérique. *Nouvelle Revue d'Entomologie (supplément)*, **7**(1): 1–352.
- Baraud, J.** 1985. Coléoptères Scarabaeoidea. *Faune du Nord de l'Afrique du Maroc au Sinai*. Encyclopédie Entomologique 46. 652 pp. Lechevalier, Paris.
- Číla, P. & Král, D.** 2012. Scarabaeoidea (Coleoptera) in the vicinity of Těptín village (central Bohemia). *Klapalekiana*, **48**: 23–28.
- Dellacasa, G., Bordat, P. & Dellacasa, M.** 2001. A revisional essay of world genus-group taxa of Aphodiinae. *Memorie della Società Entomologica Italiana, Genova*, **79** (2000): 1–482.
- Dellacasa, M.** 2004. Scarabaeoidea 'Laparosticta' di Corsica. *Atti della Società Toscana di Scienze Naturali. Memorie Serie B (Supplemento)*, **110** (2003): 1–361.
- Hollande, A. & Théron, J.** 1999. Aphodiidae du nord de l'Afrique (Coleoptera Scarabaeoidea) (au soin de Dellacasa, G.). *Monografie del Museo Regionale di Scienze Naturali*, **21** (1998): 1–280.
- Janssens, A.** 1951. Revision des Aegialiinae et Aphodiinae (Coeleoptera Scarabaeidae) de la Belgique. *Mémoires de l'Institut Royal des Science Naturelles de Belgique*, **115**: 1–136.
- Krell, F.-T.** 1992. Aphodiinae. Pp. 211–242 *In* Krell, F.-T. & Fery, H., *Familienreihe Lamellicornia*. Pp. 200–252. *In* Lohse, G.A. & Lucht, W.H. (Eds.), *Die Käfer Mitteleuropas*, vol. 13. Goecke & Evers, Krefeld.
- Paulian, R. & Baraud, J.** 1982. *Lucanoidea et Scarabaeoidea. Faune des coléoptères de France*, II. 473 pp. Lechevalier, Paris.



**Comments on the proposed precedence of *Maculinea* Eecke, 1915 over *Phengaris* Doherty, 1891 (Lepidoptera, LYCAENIDAE)**

(Case 3508; see BZN 67: 129–132, 245, 315–319; 68: 292–293)

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This comment is in support of Case 3508 to conserve the junior synonym *Maculinea* Eecke, 1915 for the Large Blue butterfly. The historical use of the two synonyms, *Maculinea* Eecke, 1915 and *Phengaris* Doherty, 1891 is summarized by Paclt (2012), with *Maculinea* shown to be very widely used and *Phengaris* very little used, almost solely by, or following, the authors of the comment opposing the case. Article 23.2 of the Code (the Principle of Priority) is to be used to promote stability, and not to upset a long-accepted name in its accustomed usage by introducing a little-used senior synonym as was done by Fric et al. (2007). The genus *Phengaris* was introduced in 1891, and since then has been the subject of very few publications, while *Maculinea* was used in all catalogues, field guides and educational posters and has been the subject of numerous behavioural, ecological and conservation studies. The Commission is formally asked for a ruling in support of Case 3508 and for conservation of the junior synonym *Maculinea*, which is a classical case of common usage vs priority, as described in Article 23.9.3 of the Code.

**Additional reference**

**Paclt, J.** 2012. In defence of the accustomed generic name *Maculinea* Eecke (Lepidoptera, Lycaenidae), *Deutsche Entomologische Zeitschrift*, **59**(2): 317–320.

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I support the recent application by Balleto et al. (BZN 67: 129–132), reinforced by the response of Morris et al. (BZN 68: 292–293) which under Article 23.9.3 of the Code seeks to conserve the widely used generic name *Maculinea* van Eecke, 1915 in its accustomed usage while being threatened by its senior synonym *Phengaris* Doherty, 1891; the proposal being that *Maculinea* be given precedence over *Phengaris* whenever the two are considered to be synonyms.

Whilst accepting that *Phengaris* should take precedence one could argue that this is far from being a normal case and that other considerations should be allowed to apply.

Previous submissions mentioned above have adequately covered the taxonomic aspect of the argument, however, speaking as an amateur lepidopterist, the genus *Maculinea* and in particular *M. arion*, the Large Blue, represents to many people an iconic and flagship group of species which has, thanks to the pioneering efforts of many dedicated environmental specialists, spearheaded the invertebrate conservation movement, and is identified and recognised as such in the eyes of the general public as well as all invertebrate zoologists.

To erase *Maculinea* from current literature would, I suggest, not only be confusing but also counter-productive.



## (3) D.J. Simcox

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I support the application by Balletto et al. (2010) to give precedence to *Maculinea* van Eecke, 1915 over *Phengaris* Doherty, 1891.

I have worked on *Maculinea* butterflies in the United Kingdom and across Europe for 30 years. My work has encompassed both academic research and, as the Project Manager of the U.K. re-introduction programme since 1999, delivering evidence-based conservation which involves advising, training and liaising with a wide range of conservation professionals, statutory authorities, NGOs, expert amateurs, volunteers and the general public. Successful delivery of the project depends on being able to communicate a complex ecological story in an accessible manner not helped in any way by the *Maculinea*/*Glaucopsyche*/*Phengaris* debate.

In practice virtually everyone, and all essential organisations, involved in the project have historically used, and continue to use, the generic name *Maculinea*.

## (4) P.R. Eeles

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I support the application by Balletto et al. (BZN 67: 129–132) to give precedence to *Maculinea* van Eecke, 1915, over *Phengaris* Doherty, 1891.

My position on this matter has arisen through working with many Butterfly Conservation staff over the years, as well as running the U.K. Butterflies website ([www.ukbutterflies.co.uk](http://www.ukbutterflies.co.uk)) for over a decade. It is a simple fact that the ‘lingua franca’ when referring to the genus of the ‘Large Blue’ group is *Maculinea*. This name has been in practical use for as long as I can remember and is commonly used by the U.K. Butterflies membership (2253 members as of 1st March 2013).

My position, however, has not arisen out of a personal desire to see the commonly-used name stand, but in view of the upset that using any name other than *Maculinea* would cause in relation to real conservation issues. Aside from confusing the general public, I feel that a change in name would also cause confusion among those undertaking site surveys (and corresponding research) when planning applications are put forward. In essence, gathering pertinent information in relation to *Maculinea* will become unnecessarily convoluted. In this case I believe that the welfare of such a threatened group of butterflies should outweigh the naming precedence.